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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,072	09/14/2000	John Border	PD-200053	1446

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THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
P O BOX 956
EL SEGUNDO, CA 90245-0956

EXAMINER	
EL CHANTI, HUSSEIN A	

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/662,072	BORDER ET AL.	
	Examiner	Art Unit	
	Hussein A El-chanti	2157	

-- The MAILING DATE of this communication appears on the cov r sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,5-29,32,34-59,61 and 62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,5-29,32,34-59,61 and 62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to RCE received on Sep. 7, 2004. Claims 3 and 32 were amended. Claims 3, 5-29, 32, 34-59 and 61-62 are pending examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 3, 5-19-29, 32, 34-59 and 61-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Yates et al., U.S. Patent No. 6,167,438 (referred to hereafter as Yates).

As to claims 3 and 32, Yates teaches a network apparatus and method comprising:

a proxy which facilitates communication with other network entities by performing at least one performance enhancing function, the proxy communicating with the other network entities via a first type of connection and other network entities via a second type of connection (see col. 3 lines 52-col. 4 lines 8).

the proxy establishes multiple connections of the first type associated with different applications and includes:

a spoofing element, configured to intercept and alter a data flow within one of the connections to add or delete from the data flow to reduce startup latency which only spoofs connections of the first type associated with at least one of applications with high throughput and applications for which reduced startup latency is desired (see col. 4 lines 62-col. 5 lines 11 and col. 9 lines 60-col. 10 lines 30).

As to claims 5 and 34, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein said spoofing element assigns spoofing resources including buffer space and control blocks to the spoofed connections (see col. 9 lines 60-col. 10 lines 30).

As to claims 6 and 35, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein said spoofing element spoofs connections using at least one spoofing rule based on destination address, source address, destination port number, source port number, options, a differentiated services (DS) field or combinations thereof (see col. 14 lines 20-col. 16 lines 65).

As to claims 7 and 36, Yates teaches the apparatus and method of claims 6 and 35 respectively wherein said spoofing element defines the at least one spoofing rule in a spoofing profile (see col. 9 lines 60-col. 10 lines 30).

As to claims 8 and 37, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the spoofing element spoofs ACKs (see col. 9 lines 15-34).

As to claims 9 and 38, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the spoofing element spoofs a tree-way handshake (see col. 9 lines 15-34).

As to claims 10 and 39, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the proxy includes:

a protocol element which multiplexes multiple connections of the first type onto a single connection of the second type (see col. 9 lines 35-52).

As to claims 11 and 40, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the proxy includes:

a prioritization element which prioritizes connections of the first type to determine what priority level of the connection of the second type, each of the connections of the first type are assigned (see col. 14-col. 16).

As to claims 12 and 41, Yates teaches the apparatus and method of claims 11 and 32 respectively 41wherein said prioritizing element prioritizes connections using at least one prioritizing rule based on destination address, source address, destination port number, source port number, a differentiated services (DS) field, a type of data contained within the connection or combinations thereof (see col. 9 lines 60-col. 10 lines 30 and col. 14 lines 35-col. 16 lines 60).

As to claims 13 and 42, Yates teaches the apparatus and method of claims 12 and 41 respectively wherein said prioritizing element defines the at least one prioritizing rule in a prioritizing profile (see col. 9 lines 60-col. 10 lines 30 and col. 14 lines 35-col. 16 lines 60).

As to claims 14 and 43, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the proxy includes:

a path selection element which selects a path for data associated with connections of the first type across connections of the second type or connections of other types (see col. 10 lines 31-63).

As to claims 15 and 44, Yates teaches the apparatus and method of claims 14 and 43 respectively wherein said path selection element can select up to N paths (N>1) where the Nth path is selected only if the (N-1) path fails (see col. 28 lines 26-30).

As to claims 16 and 45, Yates teaches the apparatus and method of claims 15 and 44 respectively wherein said path selection element selects a path using at least one path selection rule based on priority, destination address, source address, destination port number, source port number, protocol, a differentiated services (DS) field or combinations thereof (see col. 9 lines 60-col. 10 lines 30 and col. 14 lines 35-col. 16 lines 60).

As to claims 17 and 46, Yates teaches the apparatus and method of claims 16 and 45 respectively wherein said spoofing element defines the at least one path selection rule in a path selection profile (see col. 9 lines 60-col. 10 lines 30 and col. 14 lines 35-col. 16 lines 60).

As to claims 18 and 47, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the proxy includes:

a compression/encryption element, which compresses and/or encrypts data associated with connections of the first type for transmission across connections of the second type (see col. 18 lines 21-36).

As to claims 19 and 48, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the first connection uses a high layer protocol (see col. 9 lines 15-23).

As to claims 20 and 49, Yates teaches the apparatus and method wherein the first connection uses one of the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP) (see col. 12 lines 24-38).

As to claims 21 and 50, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the second connection is a backbone connection (see fig. 1).

As to claims 22 and 51, Yates teaches the apparatus and method of claims 3 and 32 respectively where is the connection is a wireless link (see col. 5 lines 59-col. 6 lines 2).

As to claims 23 and 52, Yates teaches the apparatus and method of claims 22 and 51 respectively, wherein the wireless link has high latency and high error rate (see col. 5 lines 59-col. 6 lines 2).

As to claims 24 and 53, Yates teaches the apparatus and method of claims 22 and 51 respectively wherein the wireless link is a satellite link (see col. 5 lines 59-col. 6 lines 2).

As to claims 25 and 54, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein said network apparatus is a component of a network gateway (see fig. 1).

As to claims 26 and 55, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein said network apparatus is a component of a host (see col. 9 lines 30-65).

As to claims 27 and 56, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein said network apparatus is a component of a hub (see col. 6 lines 1-col. 7 lines 54).

As to claims 28 and 57, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein the network apparatus is a component of a VSAT (see col. 5 lines 59-col. 6 lines 2).

As to claims 29 and 58, Yates teaches the apparatus and method of claims 3 and 32 respectively wherein said network apparatus is a component of a router (see col. 9 lines 30-65).

As to claim 59, Yates teaches the method of claim 32 wherein the method is performed in a switch (see col. 9 lines 30-65).

As to claim 61 and 62, Yates teaches a method and instructions for providing data communication over a network comprising:

communicating with a plurality of hosts over a plurality of connections corresponding to a plurality of applications resident on the respective hosts (see col. 7 lines 62-col. 8 lines 10 and col. 9 lines 44-col. 10 lines 11);

determining which of the plurality of connections is to receive priority processing for transport over a backbone connection established over the satellite link (see col. 9 lines 25-37 and col. 5 lines 35-col. 6 lines 15);

transmitting the data streams over the backbone connection and concurrently acknowledging the corresponding hosts (see col. 7 lines 62-col. 8 lines 10 and col. 9 lines 44-col. 10 lines 11).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- System and method for enhancing a server's ability to withstand a "SYN flood" denial of service attack by Srinivas, U.S. Patent No. 6,823,387
- Proxy server for TCP/IP network address portability by Brothers et al., U.S. Patent No. 6,822,955
- SYSTEM AND METHOD FOR HIGH-PERFORMANCE DELIVERY OF WEB CONTENT USING HIGH-PERFORMANCE COMMUNICATIONS PROTOCOL BETWEEN THE FIRST AND SECOND SPECIALIZED INTERMEDIATE NODES TO OPTIMIZE A MEASURE OF COMMUNICATIONS PERFORMANCE BETWEEN THE SOURCE AND THE DESTINATION by Grove et al., U.S. patent No. 6,820,133
- Enhanced network communication By Sidhar et al., U.S. Patent No. 6,324,582
- Application-aware, quality of service (QoS) sensitive, media access control (MAC) layer by Jorgensen, U.S. Patent No. 6,640,248

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

Dec. 21, 2004

ARIO ETIENNE
SUPERVISORY PATENT EXAMINER